

CLAIMS:

We claim:

1 1. A method comprising:

2 organizing concepts according to their meaning into a
3 lexicon, said lexicon defining elements of a semantic space; and
4 providing a meaning differentiator in response to an input
5 query, said meaning differentiator presenting a set of concepts
6 from said lexicon that are related to said query.

1 2. A method according to claim 1 wherein said organizing

2 includes:

3 determining a semantic distance from a first concept and a
4 second concept, said semantic distance representing the closeness
5 in meaning between said first concept and said second concept;
6 and

7 determining the relationship between said first concept and
8 said second concept.

1 3. A method according to claim 1 further comprising:

2 presenting results of a search conducted on a target data
3 set in accordance with said set of concepts.

1 4. A method according to claim 4 wherein said search is

2 conducted by ranking elements of said target data set according
3 to conceptual relevance.

1 5. A method according to claim 3 further comprising:

2 refining said search results by filtering for desired
3 concepts from said set of concepts, said refined search results
4 excluding elements of said target data set pertaining to
5 undesired concepts.

1 6. A method according to claim 1 wherein organizing
2 includes:

3 attaching meanings to elements in a predefined data set.

1 7. A method according to claim 2 further comprising:

2 determining which meanings are closely related by defining a
3 radius of semantic distance about a given meaning and excluding
4 meanings falling in distances beyond said radius.

1 8. A method according to claim 2 further comprising:

2 attaching meanings to elements in a predefined data set; and
3 calculating scores for said elements according to the

4 semantic distance between meanings attached to said elements and
5 other meanings.

1 9. A method according to claim 1 wherein said meaning

2 differentiator includes a set of meanings that could be
3 interpreted of said query or portion thereof.

1 10. A method according to claim 1 wherein providing a
2 meaning differentiator includes interpreting at least a portion
3 of said query into specific meanings.

1 11. A method according to claim 10 further comprising:
2 enabling a user to select at least one meaning from said set
3 of meanings.

1 12. A method according to claim 1 wherein said elements are
2 related by a connection, said connections including a lateral
3 bind, a kind of and a part of.

1 13. A method according to claim 12 wherein said connection
2 has an associated strength representing the degree to which said
3 elements are related.

1 14. A method according to claim 2 wherein said meanings may
2 be marked as at least one of a geographical location, offensive,
3 unique instance, timely and a proper noun.

1 15. A method according to claim 13 wherein said strength
2 from a first element to a second element may be different from
3 the strength from said second element to said first element.

1 16. A method according to claim 6 wherein said predefined
2 data set is the target data set.

1 17. A method according to claim 6 wherein said elements are
2 subject nodes and said predefined data set is a hierarchy of
3 subjects.

1 18. A method comprising:

2 organizing concepts according to their meaning into a
3 lexicon, said lexicon defining elements of a semantic space;
4 providing a meaning differentiator in response to an input
5 query, said meaning differentiator presenting a set of concepts
6 from said lexicon that are related to said query;
7 determining a semantic distance from a first concept and a
8 second concept, said semantic distance representing the closeness
9 in meaning between said first concept and said second concept;
0 determining the relationship between said first concept and
1 said second concept; and
2 presenting results of a search conducted on a target data
3 set in accordance with said set of concepts.

1 19. An article comprising a computer readable medium having
2 instructions stored thereon which when executed cause:
3 organizing concepts according to their meaning into a
4 lexicon, said lexicon defining elements of a semantic space; and
5 providing a meaning differentiator in response to an input
6 query, said meaning differentiator presenting a set of concepts
7 from said lexicon that are related to said query.

1 20. A method of searching a network of information sources
2 comprising:

3 receiving as input a search query; and

4 searching a semantic space for data pertaining to concepts
5 close in meaning to said search query.

1 21. A method according to claim 20 wherein searching
2 includes:

3 positioning data from said information sources into a
4 semantic space.

1 22. A method according to claim 21 further comprising:

2 enabling a user to select at least one meaning from said set
3 of meanings; and

4 refining the results of said search by excluding said
5 pertaining data that relates to undesired concepts, said
6 undesired concepts excluded by inputting said selected meanings
7 and searching said search results for the pertaining data that is
8 semantically close to said selected meaning.

1 23. A method according to claim 20 wherein said information
2 sources include documents.

1 24. A method according to claim 23 wherein said documents
2 include documents accessible via the world-wide web.